

CLAIMS

1. A method for accessing a reverse channel for communication from a remote unit to a base station, comprising:

5 waiting a random period of time in response to determining that the reverse channel is available at a first time;

monitoring a forward channel after expiration of the random period of time to determine whether the reverse channel is available at a second time; and

10 transmitting to the base station a first portion of data on the reverse channel, the first portion of data being transmitted in response to determining that the reverse channel is available at the second time.

2. The method of claim 1, wherein the random period of time is a period of time between zero timeslots and an administratively selected number of timeslots.

15 3. The method of claim 1, further comprising:

determining whether the reverse channel stayed available from when the first portion of data is transmitted until a round-trip time has passed, the round-trip time being the time required for a transmission on the reverse channel to be evident on the forward channel.

20 4. The method of claim 1, further comprising:

determining whether the reverse channel is available at a round-trip time after transmitting the first portion of data, the round-trip time being the time required for a transmission on the reverse channel to be evident on the forward channel.

25 5. The method of claim 1, further comprising:

determining whether the base station successfully decoded the first portion of data.

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6. The method of claim 1, further comprising:
determining whether transmission of the first portion of data has caused the remote unit to access the reverse channel.

5 7. The method of claim 6, further comprising:
transmitting from the remote unit to the base station a second portion of the data on the reverse channel, the second portion of the data being transmitted in response to a determination that the remote unit has accessed the reverse channel.

10 8. The method of claim 6, further comprising:
performing an access failure algorithm in response to determining that the remote unit has not accessed the reverse channel.

15 9. A method for accessing a reverse channel for providing communication between a remote unit and a base station, comprising:
executing a channel access method to access the reverse channel;
waiting a random time in response to the channel access method failing to provide access to the reverse channel; and
re-executing the channel access method in response to a determination that the
20 reverse channel is not available after passage of the random time.

10. The method of claim 9, further comprising:
transmitting from the remote unit to the base station a first portion of data in response to a determination that the reverse channel is available after passage of the
25 random time, the first portion of data being transmitted on the reverse channel.

11. The method of claim 10, further comprising:
determining whether transmission of the first portion of data has caused the remote unit to access the reverse channel.

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12. The method of claim 9, wherein the random time is between an upper and lower limit, the upper limit being a function of the number of times that the channel access method fails to provide access to the reverse channel.

5 13. The method of claim 9, wherein the random time is between an upper and lower limit, the upper limit being an exponential function of the number of times that the channel access method fails to provide access to the reverse channel.

14. The method of claim 9, further comprising:
10 determining whether the channel access method has failed to provide access to the reverse channel a number of times greater than a failure limit.

15. The method of claim 14, further comprising:
discarding a data packet.